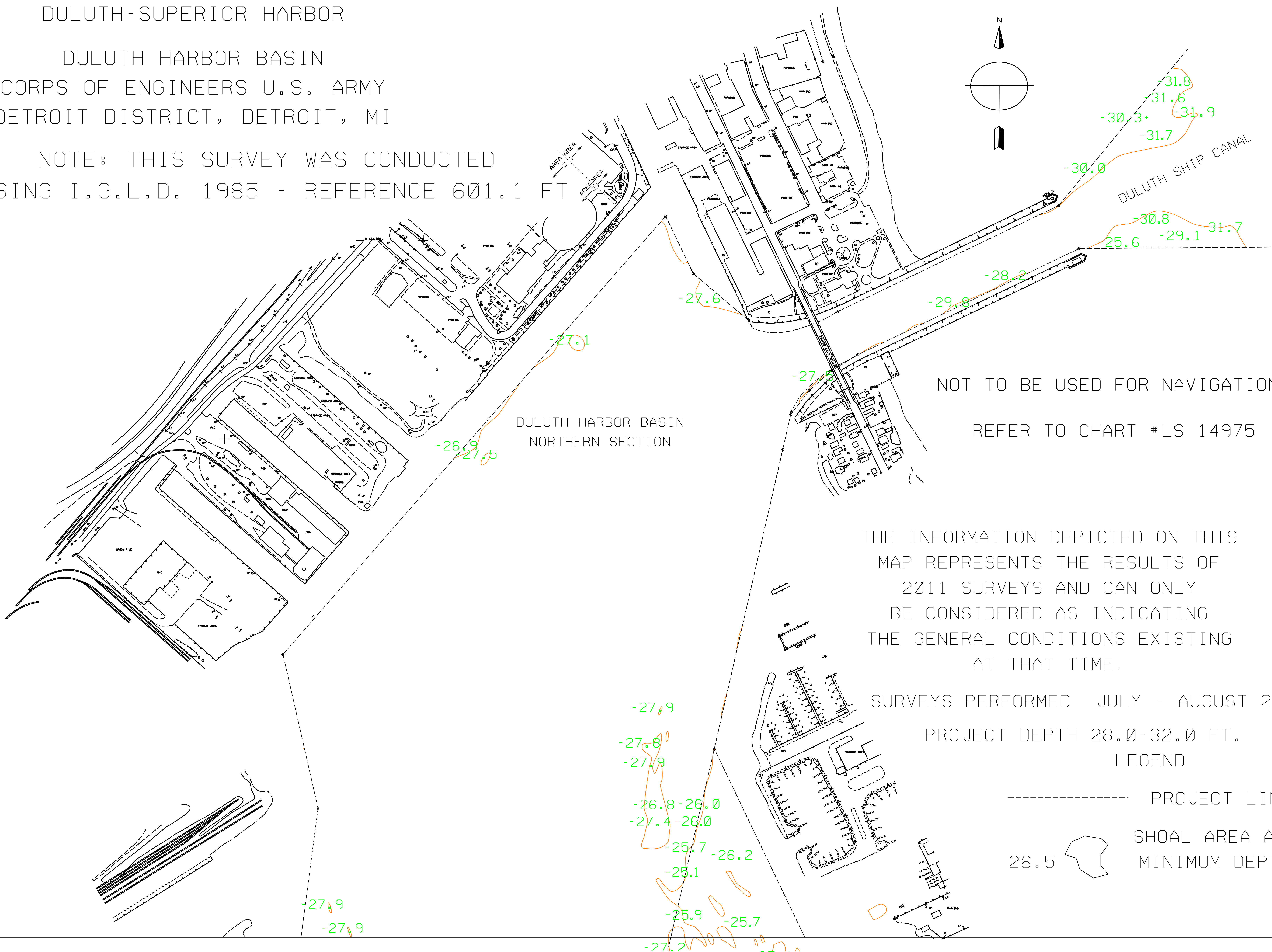


# DULUTH-SUPERIOR HARBOR

DULUTH HARBOR BASIN  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1 FT



NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED JULY - AUGUST 2011

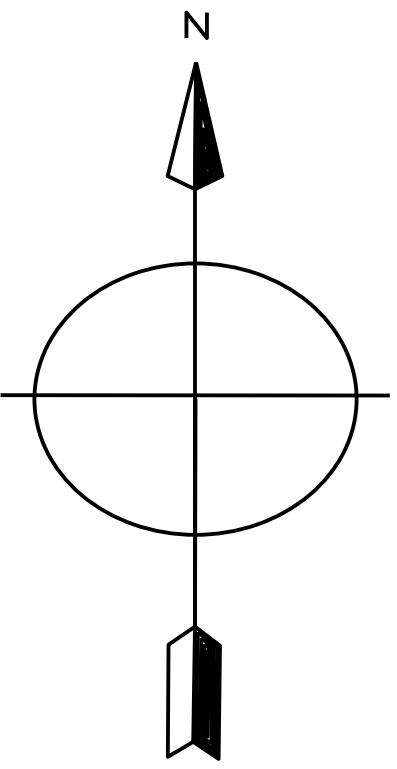
PROJECT DEPTH 28.0-32.0 FT.

LEGEND



DULUTH-SUPERIOR HARBOR

DULUTH HARBOR BASIN  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI



28.0 FT. PROJ.  
DEPTH  
27.0 FT. PROJ.  
DEPTH

DULUTH HARBOR BASIN  
SOUTHERN SECTION

NOTE: THIS SURVEY  
WAS CONDUCTED  
USING I.G.L.D. 1985  
REFERENCE 601.1

SURVEYS PERFORMED AUGUST 2011

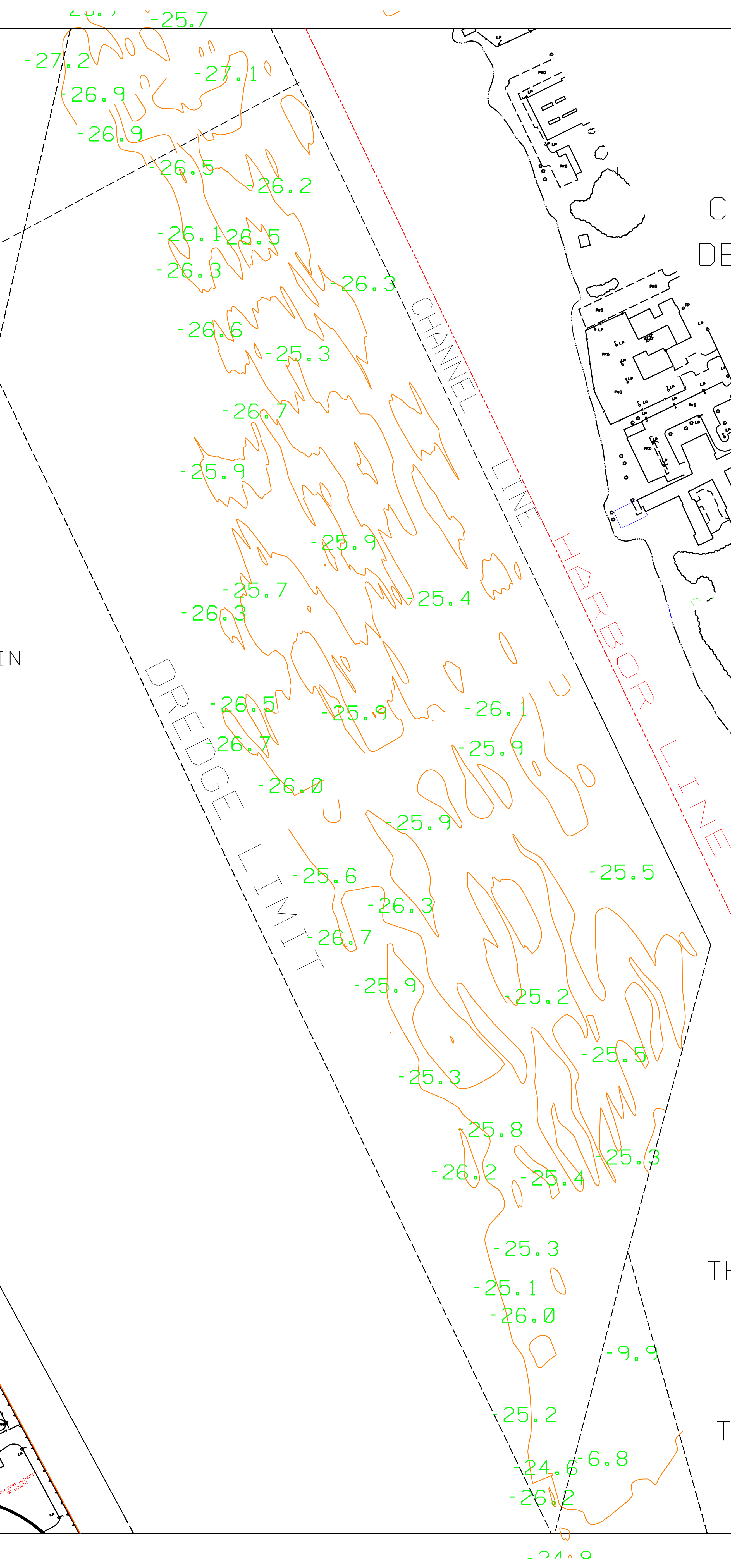
NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

LEGEND

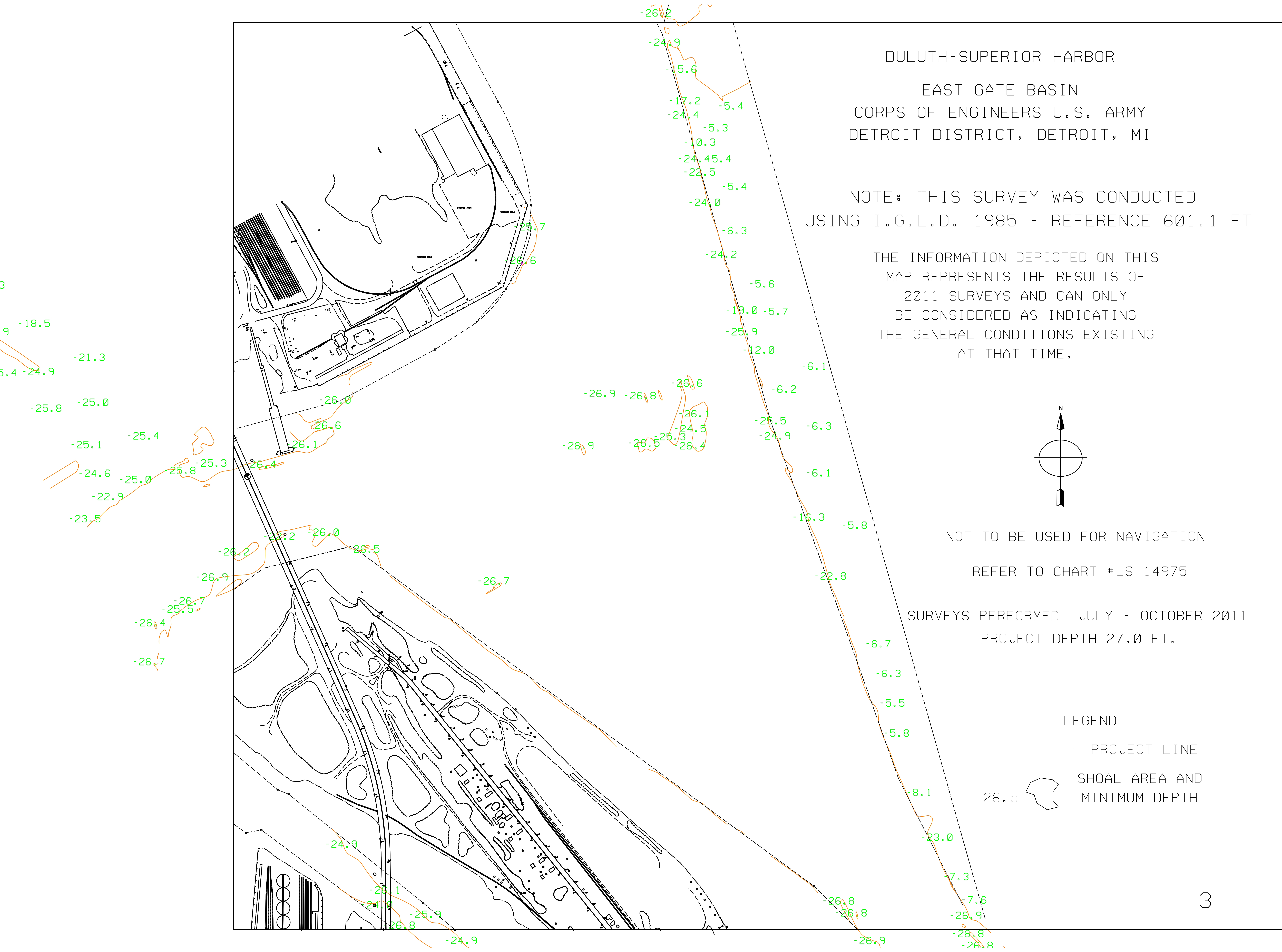
----- PROJECT LINE

26.5  SHOAL AREA AND  
MINIMUM DEPTH



THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

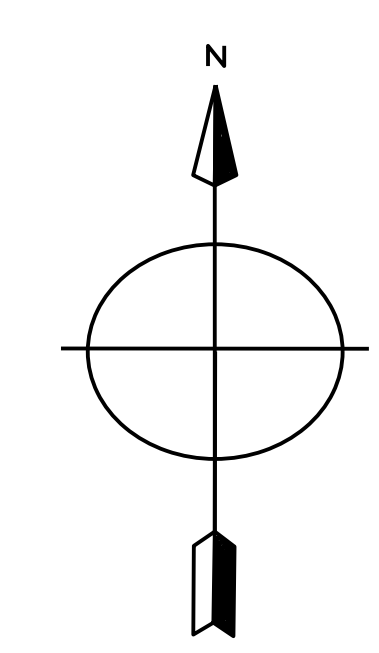




DULUTH-SUPERIOR HARBOR  
EAST GATE BASIN  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1 FT

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

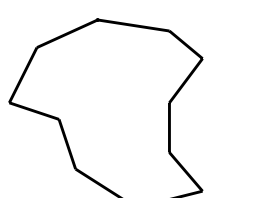


NOT TO BE USED FOR NAVIGATION

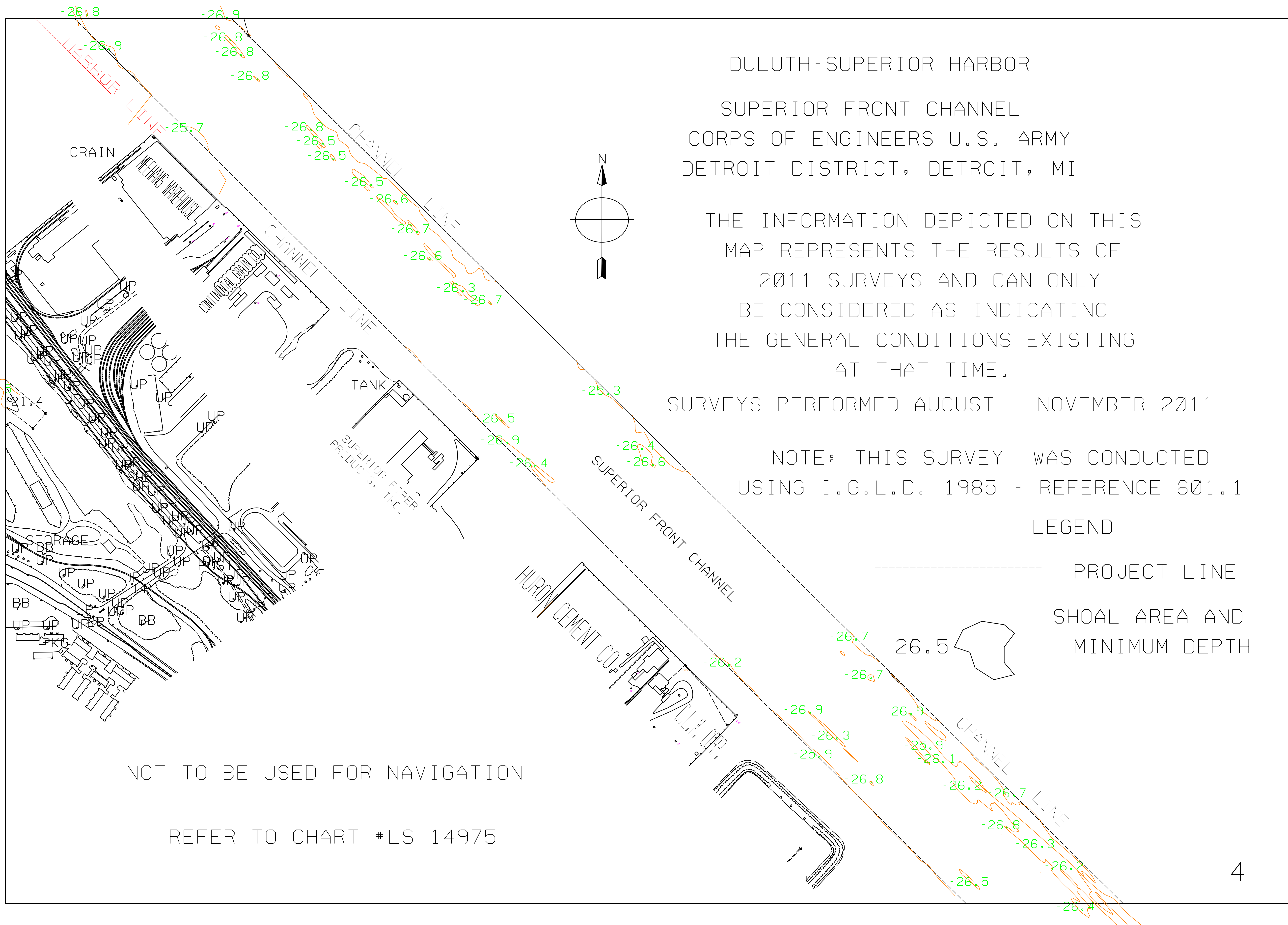
REFER TO CHART #LS 14975

SURVEYS PERFORMED JULY - OCTOBER 2011  
PROJECT DEPTH 27.0 FT.

LEGEND

- PROJECT LINE
- 26.5  SHOAL AREA AND MINIMUM DEPTH





DULUTH-SUPERIOR HARBOR  
 SUPERIOR FRONT CHANNEL  
 CORPS OF ENGINEERS U.S. ARMY  
 DETROIT DISTRICT, DETROIT, MI

THE INFORMATION DEPICTED ON THIS  
 MAP REPRESENTS THE RESULTS OF  
 2011 SURVEYS AND CAN ONLY  
 BE CONSIDERED AS INDICATING  
 THE GENERAL CONDITIONS EXISTING  
 AT THAT TIME.

SURVEYS PERFORMED AUGUST - NOVEMBER 2011

NOTE: THIS SURVEY WAS CONDUCTED  
 USING I.G.L.D. 1985 - REFERENCE 601.1

LEGEND

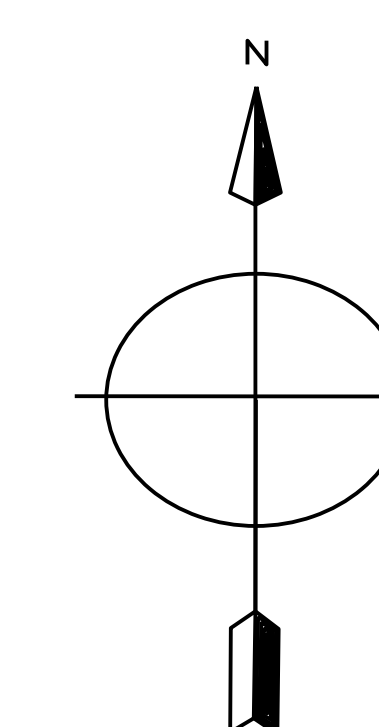
- PROJECT LINE
- SHOAL AREA AND MINIMUM DEPTH

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975



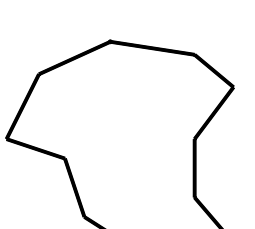
DULUTH-SUPERIOR HARBOR  
SUPERIOR FRONT CHANNEL  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI



THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED IN JULY - NOVEMBER 2011

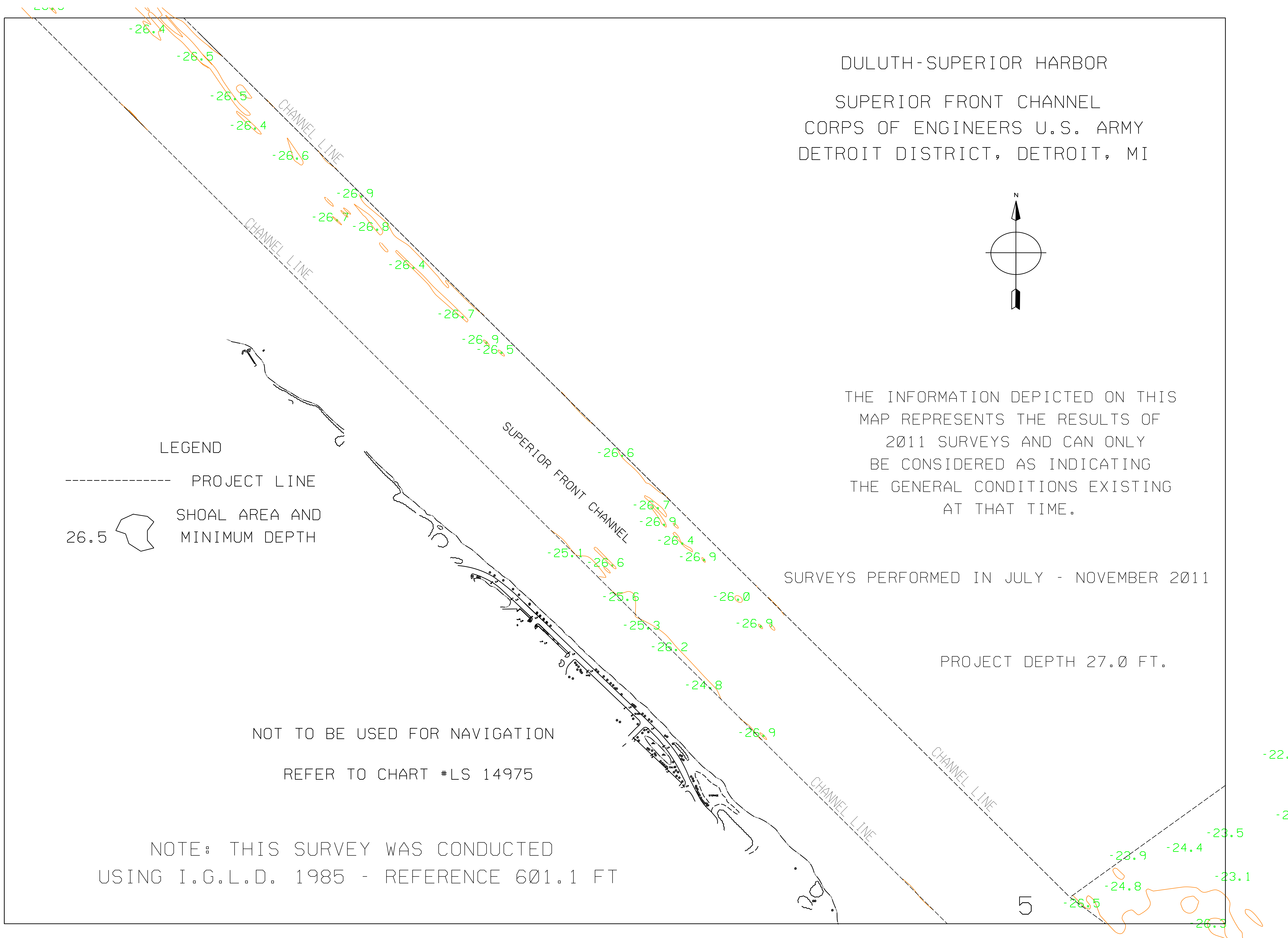
PROJECT DEPTH 27.0 FT.

LEGEND  
----- PROJECT LINE  
26.5  SHOAL AREA AND  
MINIMUM DEPTH

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1 FT

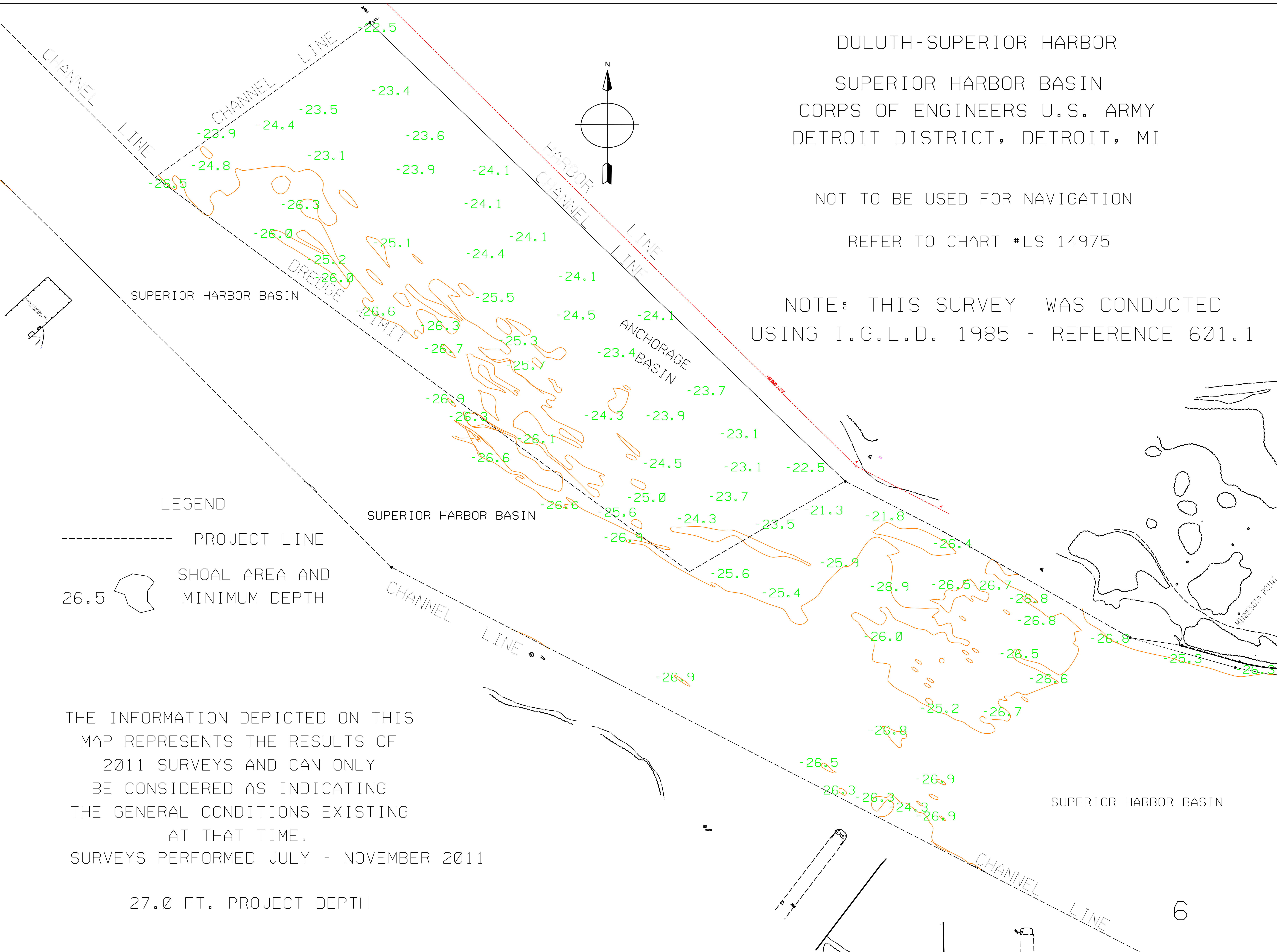


DULUTH-SUPERIOR HARBOR  
SUPERIOR HARBOR BASIN  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1



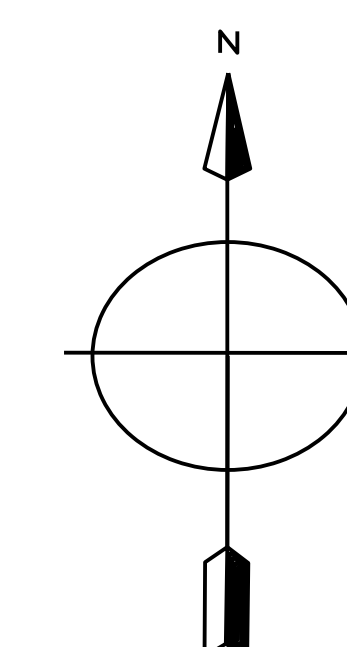
- LEGEND
- PROJECT LINE
  - 26.5 SHOAL AREA AND MINIMUM DEPTH

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.  
SURVEYS PERFORMED JULY - NOVEMBER 2011

27.0 FT. PROJECT DEPTH



DULUTH-SUPERIOR HARBOR  
 SUPERIOR HARBOR BASIN  
 CORPS OF ENGINEERS U.S. ARMY  
 DETROIT DISTRICT, DETROIT, MI



THE INFORMATION DEPICTED ON THIS  
 MAP REPRESENTS THE RESULTS OF  
 2011 SURVEYS AND CAN ONLY  
 BE CONSIDERED AS INDICATING  
 THE GENERAL CONDITIONS EXISTING  
 AT THAT TIME.

SURVEYS PERFORMED JULY - AUGUST 2011  
 PROJECT DEPTH 27.0 FT.

NOTE: THIS SURVEY WAS CONDUCTED  
 USING I.G.L.D. 1985 - REFERENCE 601.1 FT

NOT TO BE USED FOR NAVIGATION

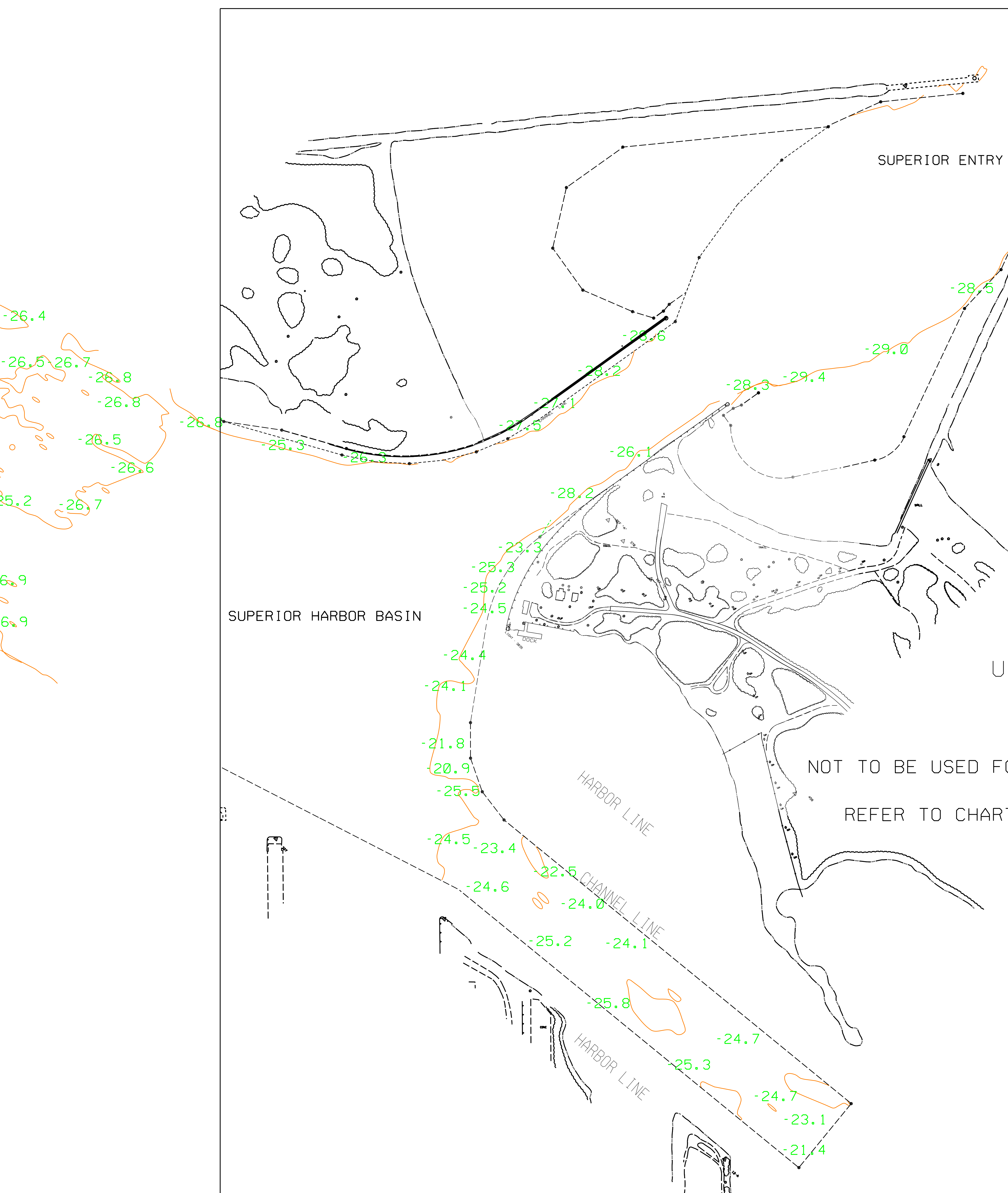
REFER TO CHART #LS 14975 NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

LEGEND

----- PROJECT LINE

26.5 SHOAL AREA AND  
 MINIMUM DEPTH



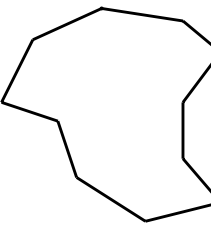


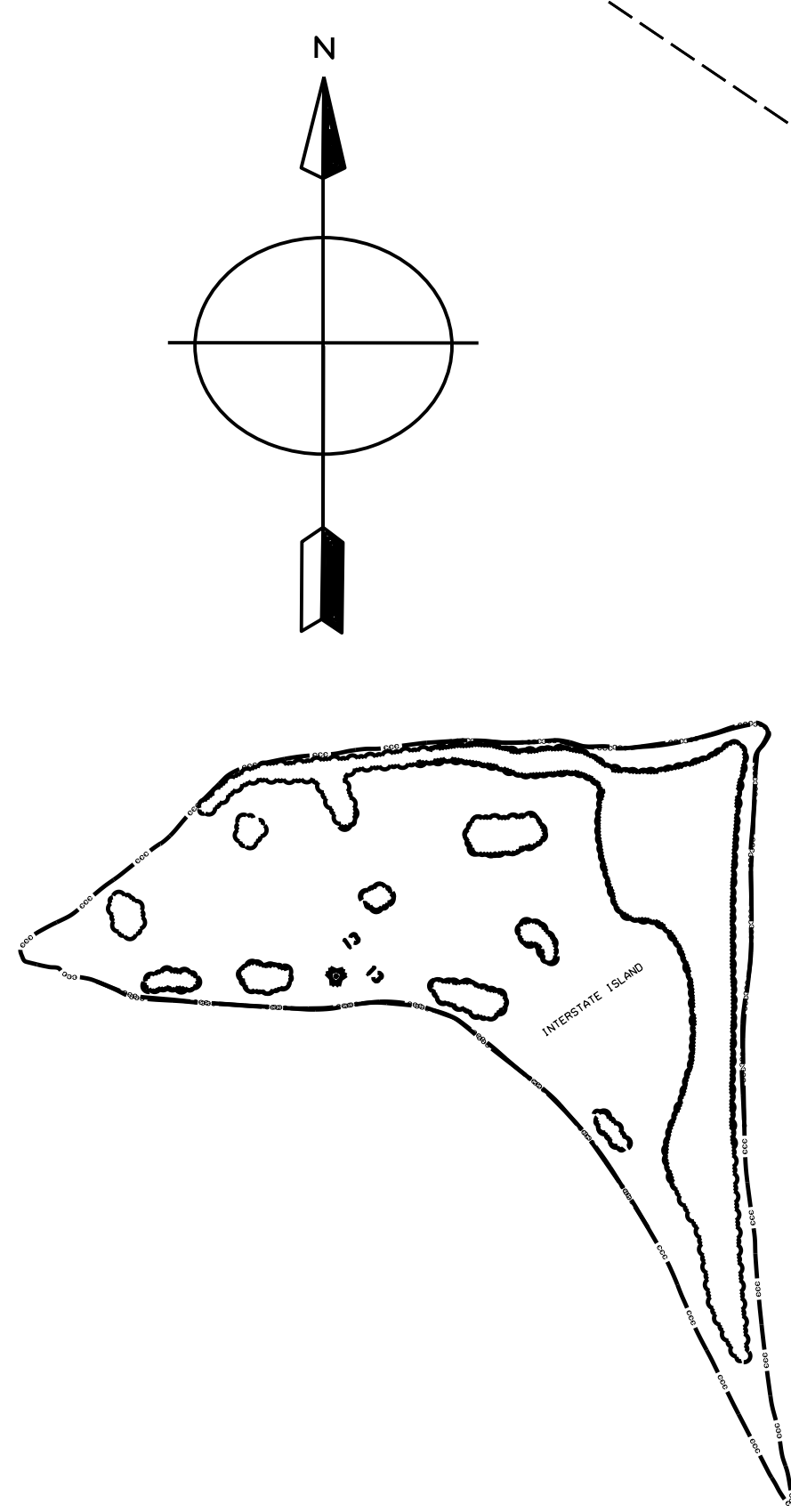
DULUTH-SUPERIOR HARBOR  
ST. LOUIS BAY  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

NOT TO BE USED FOR NAVIGATION  
REFER TO CHART #LS 14975

LEGEND

----- PROJECT LINE

26.5  SHOAL AREA AND MINIMUM DEPTH

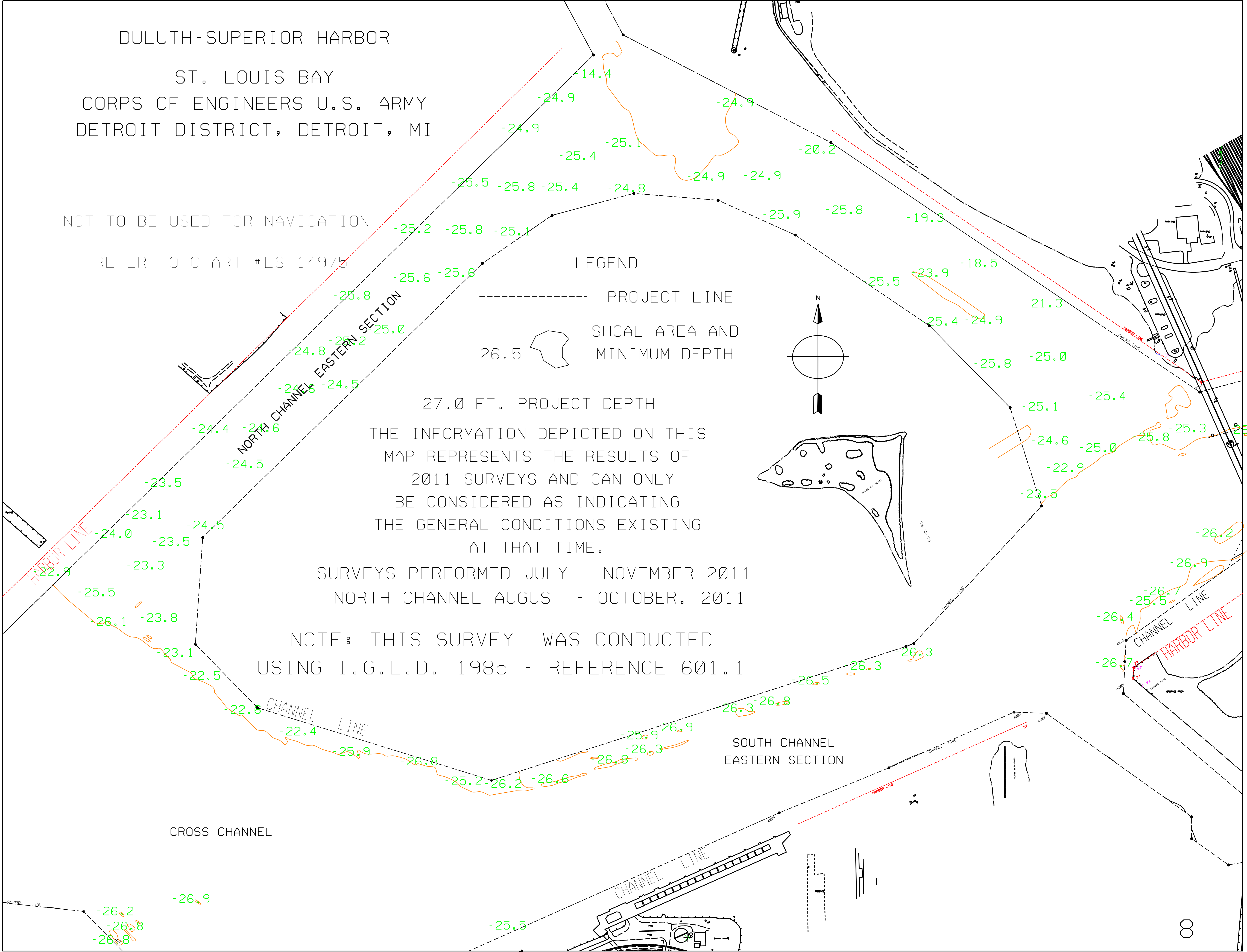


27.0 FT. PROJECT DEPTH

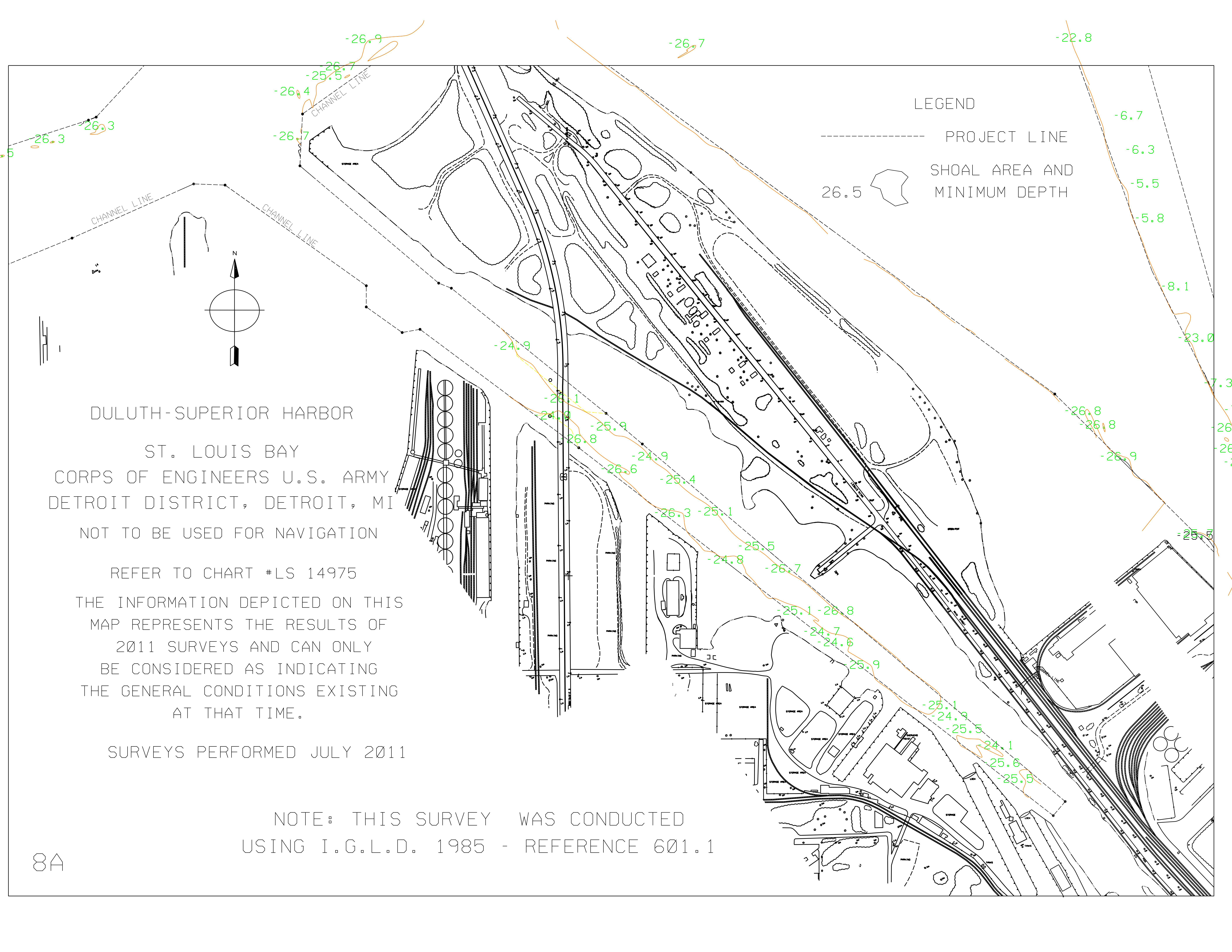
THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED JULY - NOVEMBER 2011  
NORTH CHANNEL AUGUST - OCTOBER, 2011

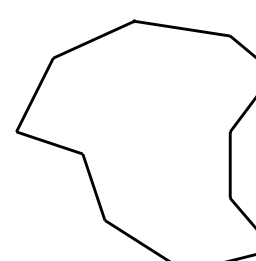
NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1







LEGEND

----- PROJECT LINE  
26.5  SHOAL AREA AND MINIMUM DEPTH

DULUTH-SUPERIOR HARBOR

ST. LOUIS BAY  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED JULY 2011

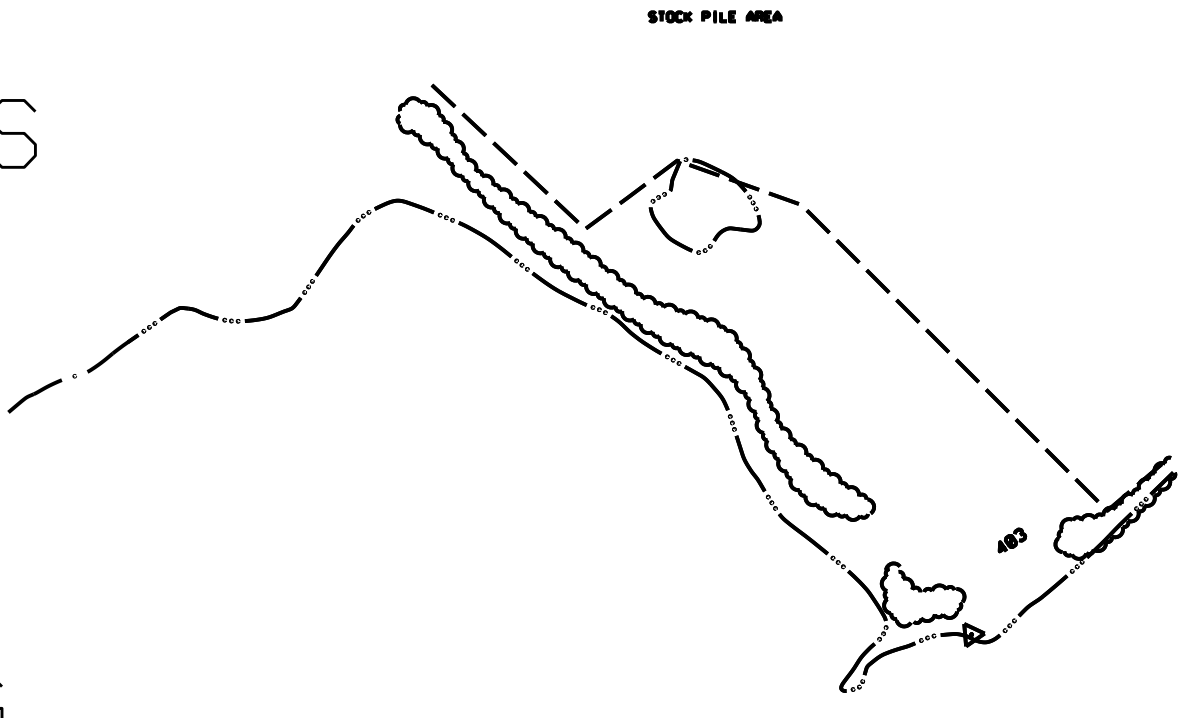
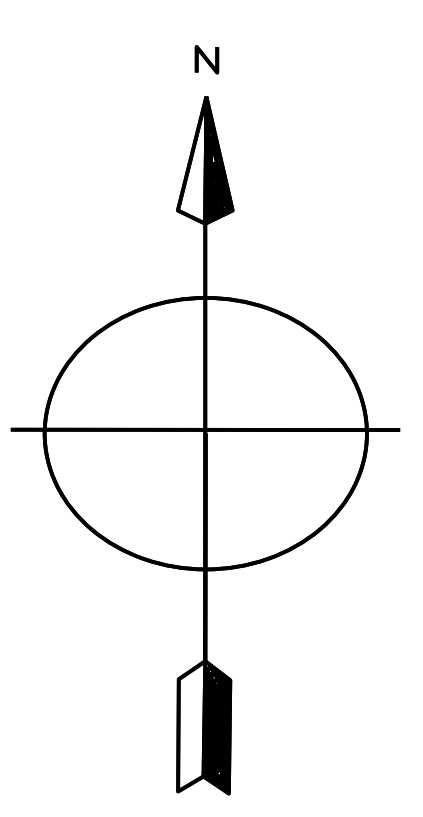
NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1



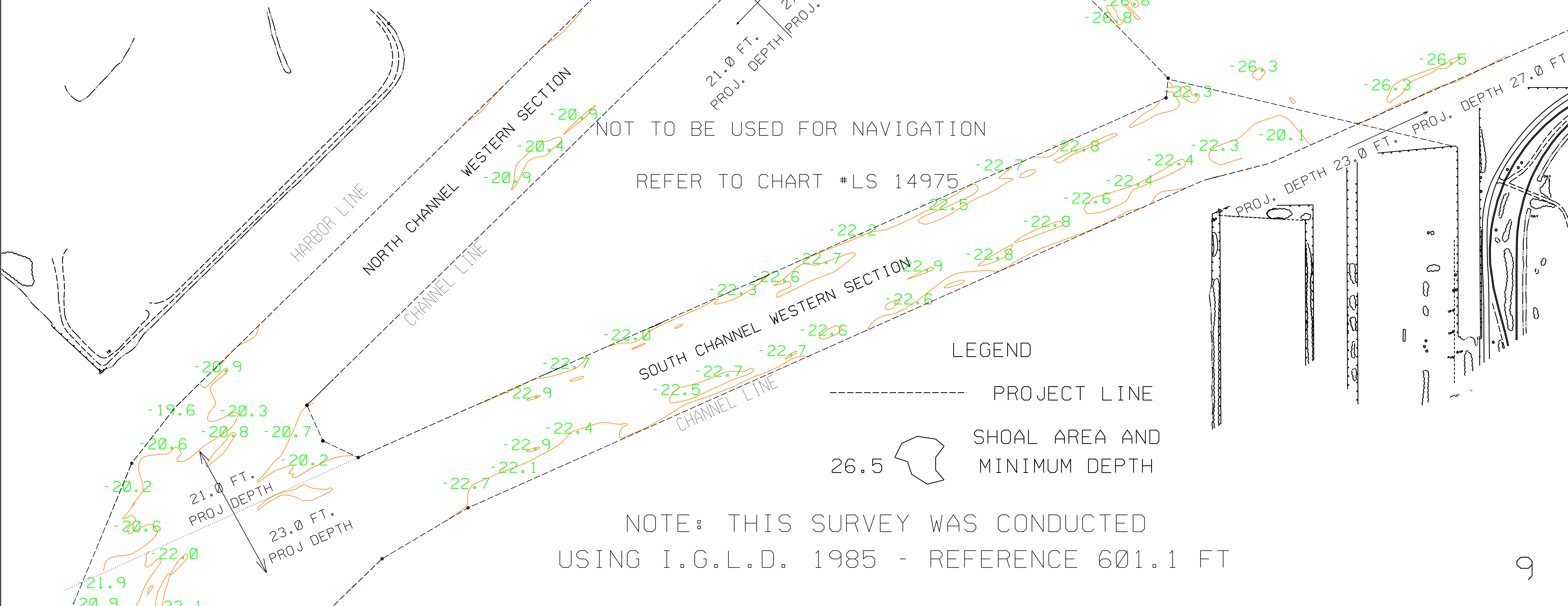
DULUTH-SUPERIOR HARBOR  
ST. LOUIS BAY  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED JULY - NOVEMBER 2011



NOT TO BE USED FOR NAVIGATION  
REFER TO CHART #LS 14975

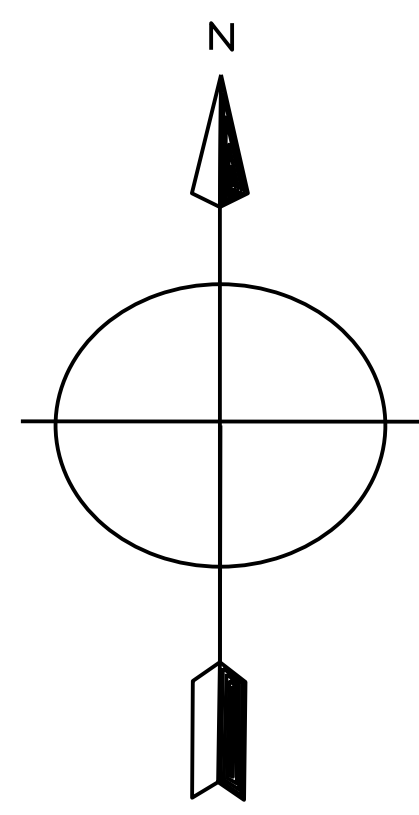




NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

DULUTH-SUPERIOR HARBOR  
MINNESOTA & UPPER CHANNELS  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI



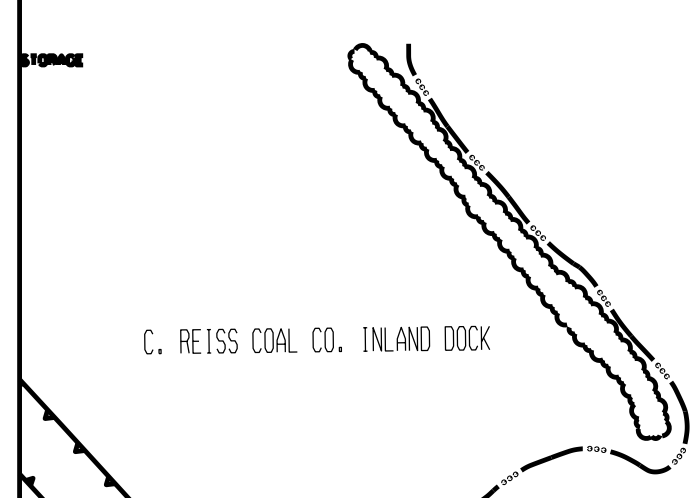
LEGEND

- PROJECT LINE
- 26.5  SHOAL AREA AND MINIMUM DEPTH

NOTE: THIS SURVEY  
WAS CONDUCTED  
USING I.G.L.D. 1985  
REFERENCE 601.1

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

surveys performed JULY - OCTOBER 2011

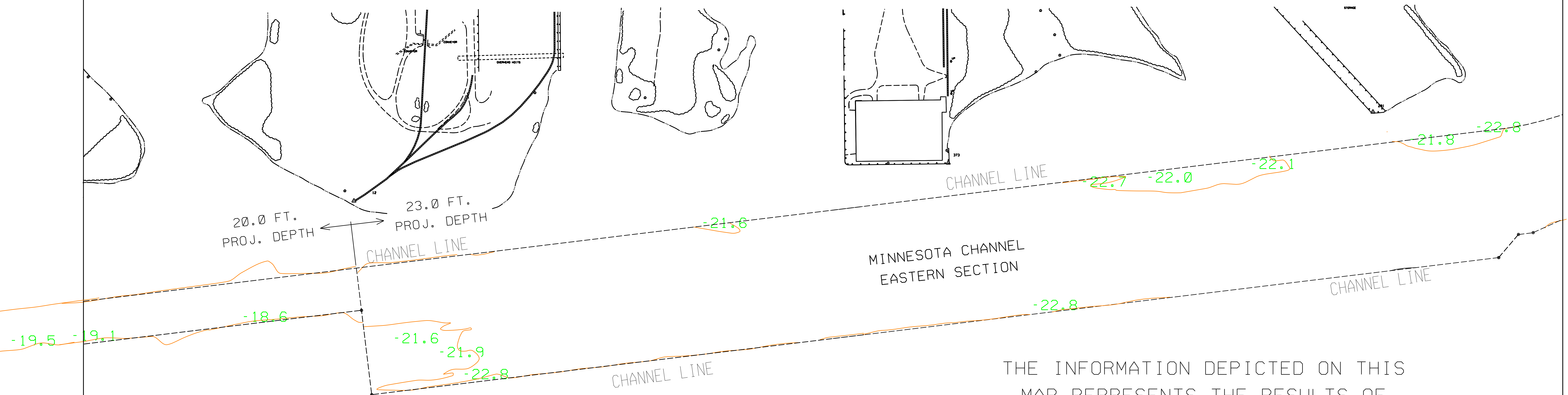
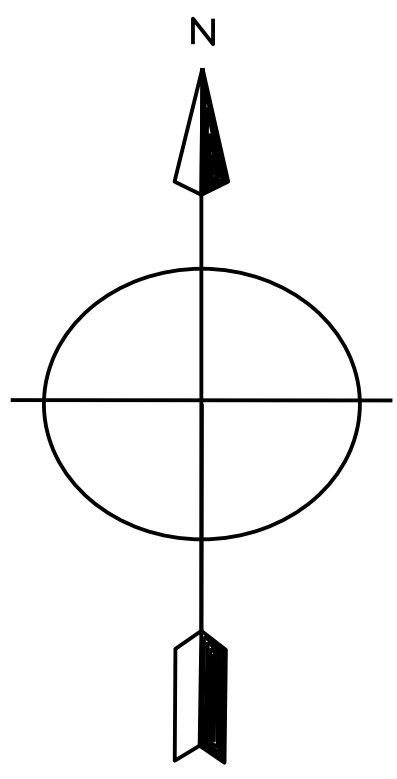


LIGHT - 369

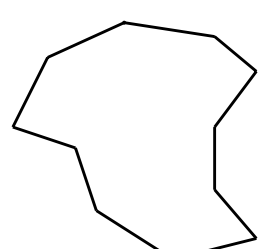
10



DULUTH-SUPERIOR HARBOR  
MINNESOTA CHANNEL  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI



LEGEND

----- PROJECT LINE  
26.5  SHOAL AREA AND MINIMUM DEPTH

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975

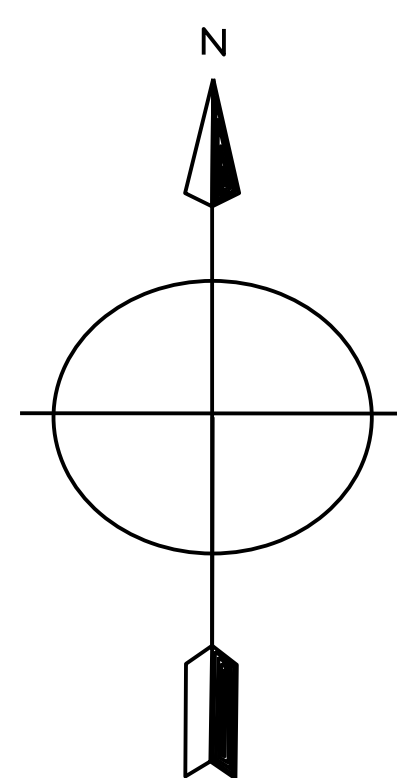
NOTE: THIS SURVEY WAS CONDUCTED  
USING I.G.L.D. 1985 - REFERENCE 601.1 FT

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2011 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED AUGUST - OCTOBER 2011

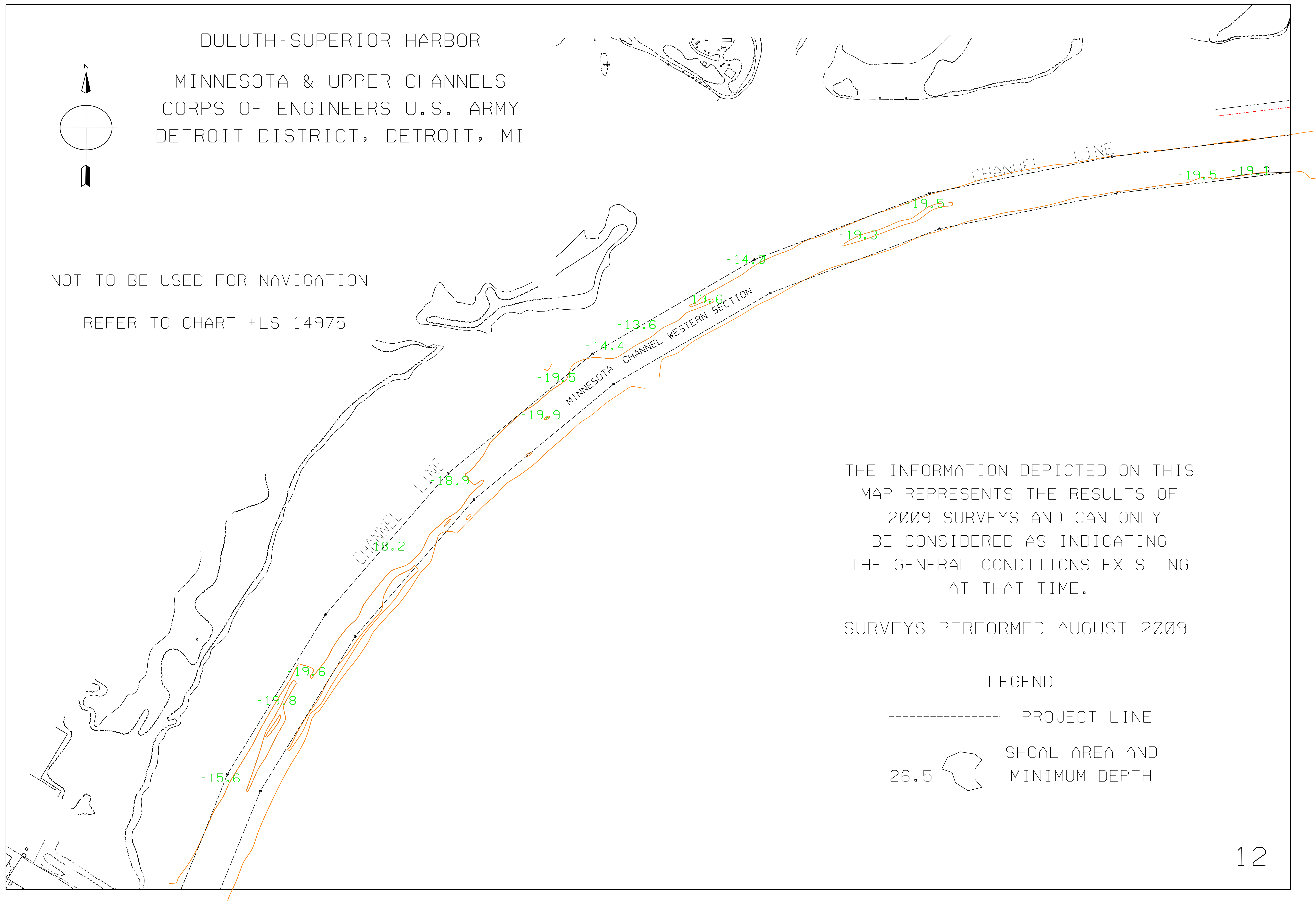


DULUTH-SUPERIOR HARBOR  
MINNESOTA & UPPER CHANNELS  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI



NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975





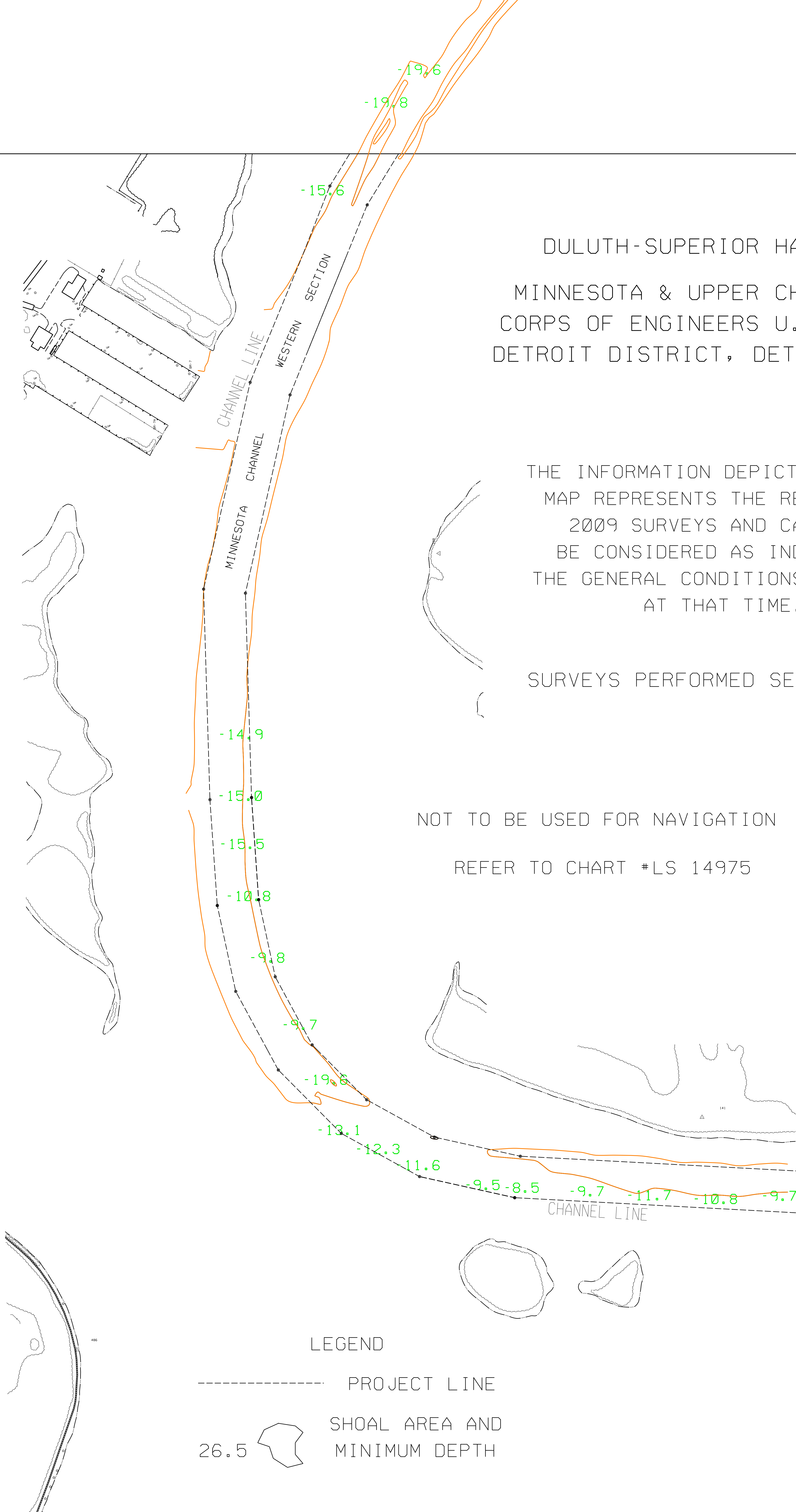
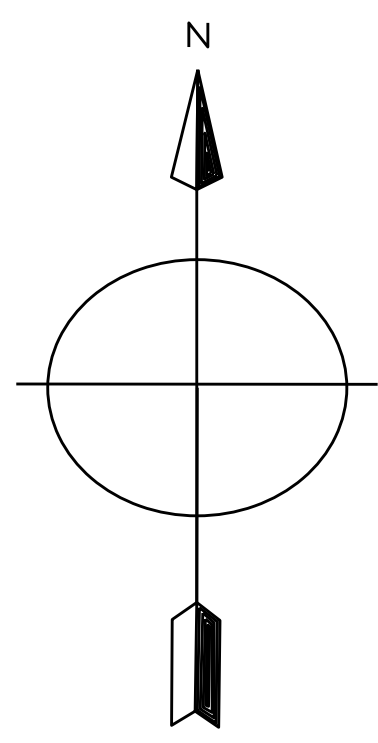
DULUTH-SUPERIOR HARBOR  
MINNESOTA & UPPER CHANNELS  
CORPS OF ENGINEERS U.S. ARMY  
DETROIT DISTRICT, DETROIT, MI

THE INFORMATION DEPICTED ON THIS  
MAP REPRESENTS THE RESULTS OF  
2009 SURVEYS AND CAN ONLY  
BE CONSIDERED AS INDICATING  
THE GENERAL CONDITIONS EXISTING  
AT THAT TIME.

SURVEYS PERFORMED SEPTEMBER 2009

NOT TO BE USED FOR NAVIGATION

REFER TO CHART #LS 14975



LEGEND

----- PROJECT LINE

26.5  SHOAL AREA AND  
MINIMUM DEPTH